

MODERN DENMARK

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ITS SOCIAL, ECONOMIC
AND AGRICULTURAL LIFE

BY
HUGH JONES

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CONTENTS

CHAPTER		PAGE
	INTRODUCTION - - - -	ix
I	GENERAL COMPARISONS - - -	I
	Relative Areas—Acreage under Cultivation—Density and Distribution of Population—Occupational Distribution—Surface and Soil—Climate—Natural Resources—Race—Emigration and Immigration—The Danish Constitution—The Present Government.	
II	HISTORICAL - - - -	7
	Misleading Enthusiasm—The Historical View—A Race of Cultivators—Serfdom—Early Legislation—Peasant Liberation—Economic and Legislative Developments—Period of Retrogression—Reform under Royal Influence—State Credit Schemes—Constitutional Changes—Consistent State Policy—Change in Production—Recent Acts of Parliament—Entailed Estates Disappear—1924 and After.	
III	POLITICAL AND ECONOMIC - -	14
	Advantages Enjoyed—Promotion of the "Husmænd"—Administration—Local Government—Sources of Revenue—National Expenditure—Taxation and Rating—Tariff Policy—Democratic Ideals—Trade—Preponderance of Agricultural Produce—Import Surplus—Banking System—Shipping.	

IV EDUCATIONAL AND RELIGIOUS - 23

High School Movement—A Misapprehension
—N.F.S. Grundtvig—The National Ideal-
ist—The School System—Primary to
University—Special and Post-Graduate
Studies—Life in a High School—A Daring
Experiment—The People's University—
The National Church—Religious Liberty
—Recent Developments.

V SOCIAL - - - - - 31

Social Legislation—Economic Conditions
—The Eight-hour Day—The Trades
Unions—Rural Labour—Wage Basis—
Social Relief Schemes—Standard of
Living—The Working Class Home—The
Family Menu—Hospitality—Alcohol—
Happy Home Life—A Disturbing Prospect
—Hospitals—Vital Statistics—Housing—
Cultural Aims—Interest in English Life
and Literature.

VI CO-OPERATIVE ENTERPRISE - - 39

Co-operation of English Origin—"The
Rochdale Plan"—Danish Adaptations—
The Period of Crisis—How the Co-operative
Idea Saved Denmark—Early Experiments
—Origin of the Co-operative Dairies—
Arable Dairying and the Bacon Industry—
—No Propaganda Necessary—National
Idealism—Purely Economic Movement—
Internal Organisation—Statistics—The
Co-operative Slaughteries—Bacon Factories
—Egg Export—Co-operative Purchase.

VII CREDIT AND INSURANCE FACILITIES 45

The Credit Pivot—Extensive Mortgages—
The Landschaft—Early Loan Systems—The
First Co-operative Credit Movement—State
Help—Financing the "Husmænd."—A
Practical Example—Agricultural Bonds on
the Market—Co-operative Insurance—Slow
but Steady Growth.

CONTENTS

vii

CHAPTER

PAGE

VIII LAND CULTURE AND PRODUCTION - 50

Attention to Detail—Scientific and Experimental Progress—Rigid Economy—Elimination of Waste—Feeding the Land—Fight with Sand and Heather—The Story of Dalgas.—Heath Reclamation—Afforestation—Rich Fünen—Crop Rotations—Grain Producing for Milk—Increase in Stock—Sugar Beet—Potatoes—Seed Growing and Market Gardening—Allotments and Flower Culture.

IX EFFICIENCY, ORGANISATION AND CONTROL - - - - - 58

Control Societies and their work—Advice on Stock Breeding and Treatment—Origin and Growth—Government Grants—Low Costs—Permanent Records—Farm Accounts—Value of Accurate Costing—Extension of the Control System—Pig Breeding and Feeding—Other Fields of Work—The Farm and the Laboratory—How Communication is Established—The Specialised Press—The Pupil-Apprentice—Casual Labour—Transport.

X DEDUCTIONS AND SUGGESTIONS - 65

BIBLIOGRAPHY AND TABLES - - 77

INTRODUCTION

THE object of this little book is to help the general reader to a clearer conception of the rural problems of this country in relation to the much-quoted case of Denmark, and to assist in clearing away the fog of misunderstanding and misrepresentation which has gathered around the comparison of our own agricultural system with that of our neighbour across the North Sea.

So far as is humanly possible I have avoided technicalities, and I have endeavoured to approach the problems without consideration of party, whether political, social or economic. It is a hackneyed saying, yet true in this case at any rate, that the outsider sees most of the game, and the difficulty in the past has been that the majority of the people who have approached this particular question have been actuated by some motive other than the desire for the discovery of the actual cause of Denmark's success and England's failure.

Other countries, Germany, Finland, and Czechoslovakia, to mention but three, have to a great extent solved their rural problems, but Denmark represents the extreme of success as England represents the extreme of failure. In England no political speaker or popular orator is considered fit to deal with the Land Question unless he can mention

Denmark half a dozen times or so in the course of the address, to illustrate the contrast between affairs as they are, and affairs as they should be. It is true that in Denmark the agricultural industry is amazingly, almost unbelievably, successful, and that in England it is appallingly, almost disastrously futile. All observers tell the same story in that respect. Differences arise when they come to account for the disparities.

The farmer says Denmark succeeded because of a good Government, a good market, and a lot of good luck; the Conservative tells you it is due to constitutional machinery operating naturally and inevitably; the Liberal attributes it to Peasant Proprietorship and Free Trade; the Socialist to the fact that a Social-Democratic Government has until recently been in power in Denmark; the educationist points to the Folk High-School, and the religious idealist to the influence of Grundtvig; the historian traces it to the system of land tenure in the twelfth century and the business man says "efficient organisation"; the co-operator —. One could go on indefinitely finding examples of one-sided explanations of Denmark's pre-eminence in the world of agriculture.

All these people have some truth on their side, but the whole truth is as elusive as the Fourth Dimension, or the Origin of Life.

I cannot hope to produce the whole truth like a rabbit out of a hat, but I can at least give a detached view of the whole situation from its very foundations, and can, I hope, point out a few fundamental truths

which may clear away misconceptions and help my readers to form their own idea as to the ideal policy of land reform in this country.

It is not my intention to preach a new gospel or to formulate a new policy. I merely beg you to bear with me through the stodgy parts and to rejoice with me in my rare bursts of enthusiasm, and to accept the contents of the following chapters as a genuine, unbiassed attempt to account for Denmark's phenomenal success in making the soil yield full measure, thereby giving her people an economic, political and cultural standard second to none in the world.

The few suggestions I have to make for the improvement of conditions at home are contained in the final chapter.

Owing to the very nature of the matter definite sub-divisions of the topic are rather futile, and are only adopted for the sake of convenience. The reader must understand that actually the various aspects of the case, which are here treated under their separate headings, are woven into an indivisible organic whole.

HUGH JONES.

Denmark, 1927.

CHAPTER I

GENERAL COMPARISONS

Relative Areas—Acreage under Cultivation—Density and Distribution of Population—Occupational Distribution—Surface and Soil—Climate—Natural Resources—Race—Emigration and Immigration—The Danish Constitution—The Present Government.

A FEW bare facts and figures must be given to form a starting point for our exposition. Figures are approximate. The authority in practically every case where Danish figures are referred to is the Danish State Statistical Department.

The area of England is 50,823 square miles, that of Denmark 15,000 square miles. Denmark is roughly half the size of Scotland. A glance at the map will show that Denmark is broken up considerably, there being several hundreds of islands, many uninhabited, distributed round the coasts.

The acreage under arable cultivation in England and Wales shows a tendency to diminish steadily. The falling off from 1923-1924 being over quarter of a million acres. The total area of arable land is approximately 10,930,000 acres. The following figures give Denmark's relative position: Total land area, 42,300 square kilometres. Soil under cultivation, 33,000 square kilometres. Forests and

of wind, and a calm day is the exception. Visibility is almost invariably good.

Compared with agriculture, the other resources and industries of the country are of minor importance for although less than forty per cent of the population is actually engaged in agriculture, forestry and fishing, the greater part of the industry is concerned with the organisation, transport, and export of agricultural produce, and the trades dependent on agriculture. Forestry is as highly developed as anywhere in Europe, systematic heath-reclamation, and planting of coniferous timber has become a considerable industry during the past few decades.

Mineral wealth is entirely lacking. There is no coal or iron, but a kind of bog iron-ore is used in the gasworks for purification. Chalk is quarried extensively, and the cement industry has grown rapidly in recent years. Lime burning and marl working are carried out for the benefit of agriculture. Clay and Kaolin provide raw materials for tile and china works.

Fishing provides employment for many, but the lack of harbours on the North Sea coast prevents the development of the industry. Esbjerg, the only port of the West coast, has grown from a group of farms to a town of 24,000 inhabitants in little over one generation. The need for fresh outlets is emphasised by the fact that two new harbours, Hirtshals, and Hantsholm, are now in course of construction.

The Danes are near relations of ours racially, and have suffered no influx of foreign elements during

the historical period, though during the time of deflation after the war, many Germans crossed the border to find employment in Denmark, but now that Germany is recovering industrially, the tendency is for these emigrants to return. Emigration of Danes to the New World has been considerable for many years; this applies particularly to sons of farmers in search of experience, or who have been unable to obtain sufficient land. A surprisingly large percentage of such emigrants return later to the homeland. The Danes are a much travelled people, and it is not unusual to find that the man who sells you your cigarettes or the girl who serves your meals at the hotel has spent several years abroad and speaks several foreign languages fluently.

The Continent of Europe holds no more democratic race than the Danes. Democracy is part of their tradition. Legislative power rests with the Crown and Parliament. Parliament consists of the Folketing and the Landsting. The Folketing is the Lower House, consisting of 149 members elected for periods of four years by men and women over the age of twenty-five. Franchise for the Landsting is limited to those over thirty-five; the election to the Upper House is indirect, and for eight-year periods, half the House retiring every four years, while nineteen members are co-opted.

Members of the Folketing receive a salary of about £220 per annum if they live in Copenhagen, and country members receive about £270.

At the 1924 election the Social Democrats secured 55 seats, the Liberals 45, the Conservatives 28, and

the Radicals 20, while one representative of the Slesvig Party (representing the German minority in Slesvig) secured a seat. The Communists put up candidates but secured only 6,000 votes in the whole country.

The Socialist Government fell in 1926, and at the election in December that year they lost power, being succeeded by a Liberal Government with a very precarious majority. The present Cabinet is really the old Neergaard Government of the period before 1924, with Herr Madsen Mygdal as Premier and Agricultural Minister, and Herr Neergaard as Minister of Finance. Several members of the old Government of 1920-24 are members of the present Cabinet. The present Premier was Minister of Agriculture under Herr Neergaard, and is one of the greatest authorities on Agriculture in the country. Noteworthy features of the 1926 election were that the "Single Tax" party secured representation, and the Slesvig party strengthened their position.

The Trades Unions are strongly organised in Denmark, and a large proportion of their members support the Social Democratic Party. In general the farmers are Liberals, the small-holders Radicals or Social Democrats, and the commercial and independent classes Conservative. Increasing support for the young Single Tax party comes from the professional classes.

CHAPTER II

HISTORICAL

Misleading Enthusiasm—The Historical View—A Race of Cultivators—Serfdom—Early Legislation—Peasant Liberation—Economic and Legislative Development—Period of Retrogression—Reform under Royal Influence—State Credit Schemes—Constitutional Changes—Consistent State Policy—Change in Production—Recent Acts of Parliament—Entailed Estates Disappear—1924 and after.

To obtain the right perspective something more is needed than a mass of figures, which, no matter how carefully selected, are apt to be misleading if unaccompanied by some account of their historical significance. It is therefore necessary, before plunging into the heart of the problem, to place a few historical facts before the reader.

The chief criticism to which the majority of writers on Danish agriculture have exposed themselves, is that they give way to blind enthusiasm, and hurl masses of uncontrovertible facts at the head of the British farmer with the implied command of "Go and do thou likewise." In these exhibitions of overwhelming enthusiasm we all recognise the purpose, but even so it is galling to the struggling farmer and misleading to the general public to read so much unqualified praise and so little critical appreciation.

We have so often been told that eighty-eight per cent of Danish land is cultivated by peasants and cottagers, and that ninety-five per cent of the number of holdings are owned by the men who work them. And we know that prosperity is general all over Denmark, but the facts are too often distorted by propagandists.

"If the Danes can do this, so can you" is the cry of the thoughtless observer or political aspirant who lectures the British farmer on his lack of enterprise.

Recently a great body of British journalists visited Denmark, and for weeks we were treated to outbursts of unrestrained enthusiasm. Even the *Times* was infected.

Instead of railing at the laxity of the British farmer—though we admit its existence—let us glance at the pages of history to obtain a more balanced view of matters.

Since the days when the Danes ceased maurauding and colonising they have remained at home getting a living out of their land. The Crown, the Church and the Nobles owned practically all the land, and until comparatively recent times the mass of the populace was compelled to work under conditions of serfdom to support the owners of the land. Estates were few and disproportionately large, and Feudal in tradition and operation. Peasants were obliged to spend the whole of their working lives in the places where they were born, cultivating the owners' land and eking out an existence with a small portion of land which was granted to them in return for service. Peasants were obliged to keep their

land in the family, and could not dispose of it to strangers.

Legislation in the fourteenth century limited the depredations of certain large owners who encroached on the peasant holdings, and in the sixteenth century land was let under certain conditions for the lifetime of the tenant. Tillage on the "Three-field" system formed the basis of their agriculture. Society consisted of three classes, Nobles, "Gaardsmænd" (or tenant farmers) and "Husmænd" ("cottars" or labourers with little or no land).

Until the dawn of the eighteenth century the Danish system was comparable in its main features with the English plan of an earlier time, but the legalised serfdom broadened gradually down to the period when the Peasant Liberation Movement began in Europe.

While in England the old Manorial system gave place to a scheme in which squires, large farmers and landless labourers figured, Germany and Denmark, in common with other Continental countries, gave the tenants opportunities of becoming owners. The movement was, in most cases, the result of natural economic development assisted by judicious legislation.

Acts which came into force in 1682 and 1725 forbade the laying waste of peasant land and the improvement of manorial lands at the expense of the peasant. The old system broke down early in the eighteenth century under the influence of a far-sighted administration, and a measure of freedom was gained by the peasantry. But an Act passed

in 1733 re-established the old system on particularly arbitrary lines, ostensibly on account of the "desertion" of the land by the younger generation of peasants.

The decades which followed were full of suffering and hardship for the peasantry. In North Germany movements were taking place for the liberation of the peasants, and the growth of the movement there probably influenced the Danish State, which in the years following 1780 introduced a number of vital reforms.

Frederick 6th instituted what proved to be the era of liberation and by personal example on the Royal Estates freed certain classes of the peasantry from the obligation of labour on the owners' land. This example was followed by many nobles and the people were thus relieved to attend to their own holdings which were withdrawn and enclosed from the common lands on payment of certain dues. This meant that the labourers were dispossessed of their free grazing, and in compensation for this loss they were in many instances allowed a few acres of land for their own use.

1786 was notable for the introduction of State credit Schemes which assisted the peasants to establish a financial claim to their holdings. In this way the "Gaardsmænd" class arose; literally translated the word means "yardmen," and it implies ownership of an enclosed farm yard; there were two kinds of yardmen, the "gentlemen yardmen" and the "farmer yardmen," and the terms survive, as also does the "priest yard" which

is the survival of the Church's extensive land ownership in the Middle Ages. Shortly after this period further legislation was introduced which benefited nobles and farmers alike, by authorising life—or long period—tenure to the newly-liberated peasantry.

The remainder of the story is simple. Throughout the period from the mid-seventeenth century until 1849 Denmark was governed by absolute monarchy. In 1849 Frederick VII. invited his people to adopt the Parliamentary system, and the Constitution was re-modelled on broadly democratic lines. Appreciating the fact that the sole wealth of the country lay in the successful exploitation of the land, the new Government gave every inducement to the peasants to secure the freehold of their holdings.

It must be borne in mind that the Napoleonic Wars left Denmark impoverished. There had been no Industrial Revolution to draw labour to large centres. The peasants had no option but to remain on the land where security of tenure and the assurance of State aid in the way of credit made an independent livelihood possible.

The policy thus instituted was pursued steadily by the succeeding governments. The crisis of half a century ago when wheat prices fell owing to the increasing supplies from the New World and Russia was successfully negotiated by the conversion from grain exportation to arable dairying, of which more will be said later.

As the nineteenth century progressed greater

inducements were offered to estate owners to part with their land and to overcome the opposition of the few stubborn resisters, legislation was introduced to make the holding of unwieldy estates unprofitable.

The amalgamation of farms was prohibited. A man might own several farms, but on each farm there must be a family established in a homestead. Many large farmers were glad to sell the freehold of portions of their lands in order to complete the purchase of their own freeholds, so that by 1835 there were only 24,800 leasehold farms compared with 41,700 freeholds.

More and more State loans were provided, until enormous sums were invested, and the Farmers' Bonds became international securities of recognised value.

The problem arose as to whether the "Husmænd" holdings should be large enough to provide full-time labour, or whether they should be small to enable the holders to work a few days a week on the larger farms.

Towards the end of the century an Act was passed which was in effect a compromise. It aimed at preventing the invasion of the towns by young rural workers, and stopping the flow of emigration, and at the same time providing the possibility of economic security by parcelling out land into small holdings capable of providing a livelihood.

The Act of 1919 deserves special notice. Certain estates had been granted to noble families in recognition of services performed to the State in the eighteenth century. These were held from the

Crown, but the property could not be sold. Under the 1919 Act a Commission was set up to value the estates and to form a basis for a scheme of State purchase. The owners of these entailed estates were asked to sell one-third of their land to the State and to purchase the freehold of the remainder by a deposit of twenty-five per cent. of the assessed value. The result in nearly every case was that the nobles were only too glad to sell the bulk of the estate as soon as the freehold could be obtained.

In 1924 further provisions were made for increasing the size of small holdings with a view to guaranteeing independence for the holders and eliminating the necessity of finding outside work on larger farms.

At the moment Denmark has two schemes which might well be termed rivals—that of freehold ownership, and the much smaller scheme of State tenancy. These two schemes will exist side by side until 1934, when the results will enable the State to decide which system is preferable.

The fact that agriculture is practically the only industry in the country and that the population is encouraged by economic conditions, and fitted by tradition and experience to work the land accounts for the trend of events in Denmark from the Middle Ages. Every other cause of Denmark's success is subordinate to the economic one, that, as there was nothing else to do, the Danes made a living by the land. The fact that they have done it better than anybody else will be explained in the chapters which follow.

CHAPTER III.

POLITICAL AND ECONOMIC

Advantages enjoyed—Promotion of the “Husmænd”—Administration—Local Government—Sources of Revenue—National Expenditure—Taxation and Rating—Tariff Policy—Democratic Ideals—Trade—Preponderance of Agricultural Produce—Import Surplus—Banking System—Shipping.

As we have seen the consistent State Policy pursued irrespective of change of Government has rendered the farmers of Denmark an immense service. Complete security of tenure, ample capital for development, a sympathetic body of officials, and a well-organised market have contributed to the building up of a feeling of national stability. In our brief historical sketch we said that the task of the Government in Denmark has been chiefly to ensure the highest possible degree of productivity on the land, and to this end the State has fostered every institution, scientific, financial, or educational, which tended to increase the efficiency, intelligence and prosperity of the farmer. This has not been done with any philanthropic motive, but from the standpoint of sound economic development. Recent provisions have not been directed to the development of the larger farms, but rather to promote greater

prosperity and independence among the "Husmænd"—the labouring class. This class, corresponding historically to our "landless labourers," has now achieved particularly under the acts of 1919 a better position than any corresponding rural body in Europe, so great has the measure of independence become that in some districts the "labouring class" has been entirely removed, and the lowest economic stratum in such districts is the "smallholder" class.

It would seem that the activities of the Danish Government are confined to making provisions for the benefit of the countrymen. This is not quite the case, though the greater part of the Government's activities are concerned with some aspects of the rural question.

Social legislation has reached a very high standard in Denmark, and will be dealt with in a separate chapter.

For the moment we are concerned with administration and finance. First we must review briefly the internal arrangements of the country. There is a Privy Council, which is the executive power; the King is President, and the members include the Crown Prince and the Ministers of State (several of whom were born in peasant homes). Local Government is chiefly in the hands of elected municipal, county and parish councils; the country is divided into twenty-two counties, each of which has a Governor. Hospitals and main roads fall within the province of the county councils, while parish councils are responsible for local schools and poor relief.

There is no unpaid magistracy ; the State controls and maintains the criminal police, and the local bodies are responsible for the municipal police.

The regular Army is very small, but conscription is still enforced. All youths between the ages of nineteen and twenty-five being liable for short training periods. The total war strength is about 100,000. The Navy is also very small and used for coast defence and patrol.

Danish public finance provides an interesting study. Both national expenditure and public debt have been nearly trebled since 1914. Customs dues provide fifty-four per cent of the total revenue, and Income and Property Tax a further thirty-two per cent. Legacy and Stamp Duties account for nearly ten per cent. For a long time the public services, which include State Railways, Telephone, Telegraph and Postal Services showed a heavy loss, but in 1924 there was a small surplus.

The Estate Tax is based on the commercial value of land, and is levied at the rate of 1.1 per 1,000 of the building value, and 1.5 per 1,000 of the ground value. The annual yield is about £166,000, of which more than half comes from the rural districts. Income Tax is based on a sliding scale ranging from .4 per cent. for the first £25 of assessable income, to twenty-five per cent. for an income exceeding £50,000. The Company Tax is levied on profits exceeding five per cent. of the share capital, and varies from seven to fifteen per cent. Law Charges, the State Lottery, and fines provide substantial

additions ; there are also amusement and restaurant taxes which represent considerable sums.

Social expenditure monopolises 19.8 per cent of the total expenditure ; fifteen per cent, is absorbed in interest on the National Debt ; Education takes sixteen per cent. and National Defence a further twelve per cent. Interior administration, including upkeep of prisons, and tax collecting takes ten per cent.

A glance at the rating system shows us that in the towns the rates payable to the Municipalities are based on a system of ground and property taxation, while in the country land is rated according to its fertility. In the accounts of the local authorities we again find social purposes and education absorbing the bulk of the income.

With regard to Denmark's Tariff Policy I may be permitted to quote Sir Wm. Ashley, who says : "Denmark may with equal appropriateness be designated a moderately Protectionist, or a moderately Free Trade country. It has never been a Free Trade country in the sense in which England has been, nor a Protectionist country in the sense in which Germany has been."

There have been recent modifications of the Customs Act, and among the imports now free of duty are : animals and animal products, seeds, and feeding stuffs, coal and coke (of which over four million tons were imported in 1925), fuel oils, iron and steel.

Luxury articles have been more heavily taxed of late, silks, skins, footwear, motor-cars and motor

tyres, wine, tobacco, fresh fruits, coffee, cocoa, and timber are among the dutiable imports.

It is often claimed that the Danes are the most democratic people in the world and statistics show the remarkably small differences between the economic strata of Denmark to-day. Denmark has few paupers and few millionaires, and in this it certainly differs from other European countries, and after an examination of the political and economic conditions of the country there is something to be said for the claim.

There is no more popular figure in Denmark than King Christian X. An American journalist—who visited the country in 1925—obtained an interview with His Majesty, and gave to the world his own impression of the King's personality and character. He wound up his estimate of the King's part in national affairs by saying that if Denmark were to become a republic there would be no doubt as to who would be elected the First President—it would be the present King, Christian X. Demonstrations of popular affection for the King are common, and he mixes with his people in an open informal way that appeals to his democratically-minded subjects. On occasion he has proved himself a statesman of conviction and ability, as witness the dissolution of the war-time parliament which had outlived its period of usefulness.

Recently there have been reactionary movements in Denmark due partly to the high taxation for social services under the Socialist régime, but on the whole political life is quiet. Occasional disturbances by

student-communists enliven the Capital, but the insignificance of the numbers of extremists of either kind render political instability a very remote possibility.

We turn now to a brief review of the country's trade. It might be expected that Denmark by her position on the map, and by the fact that Copenhagen is virtually the Capital of Scandinavia, should have a considerable transit trade. This trade assists largely in balancing the deficit which arises by the preponderance of import trade over exports.

According to the latest available figures more than four-fifths of the export value of Danish goods are accounted for by agricultural products. Great Britain buys roughly two-thirds of the export of Danish goods; this consists almost entirely of prepared agricultural produce (bacon, butter, preserved milk and cream), and eggs. Germany takes about six per cent of Denmark's export, chiefly livestock. Before the war, when Germany's financial position was better, Great Britain took a much lower percentage and Germany a much higher (over twenty-five per cent of the total export). Norway and Sweden import machinery and other manufactured goods via Denmark. France and Switzerland take agricultural produce, and Czecho-Slovakia takes a good quantity of live stock. Germany is in these days steadily increasing her purchases in Denmark and there is every indication that the pre-war level will soon be reached.

Great Britain is the only country which shows any considerable export surplus on Denmark's national

balance sheet. The balance falls heavily on the other side in regard to Germany and the United States.

Tables given at the end of the book show the relations of imports to exports. Of re-exported goods, by far the greater part goes to Norway and Sweden.

The Banking system of Denmark has received some rude shocks in recent years, but succeeds none the less in serving the country's needs. Until the recent series of casualties the four principal banks controlled two-thirds of the banking business of the country, this is due chiefly to the concentration of business in Copenhagen. The rest of the country is served by independent local banks. "Nationalbanken" is the only note-issuing bank. Formerly a State Bank it is now a private joint-stock bank with two of the five directors appointed by the State.

The Krone reached its lowest point about five years after the Armistice, touching twenty-seven to the £. It soon recovered to within measurable distance of par, though not until the Spring of 1927 did it actually reach par. The fluctuation of the exchange, and the rapid stabilisation hit the farmers very seriously in 1925-26. The Savings Bank movement became very popular in Denmark a few years ago, but has remained entirely in the hands of private concerns.

In regard to her shipping Denmark ranks fourth in Europe for shipping tonnage in relation to population.

Owing to the broken coast-line of the country

and the great number of islands that go to make up the Kingdom of Denmark, a great deal of shipping is carried on between Danish ports. The ports of Aalborg, Aarhus, Frederikshavn, Svendborg, Rød-købing, Sønderborg, Graasten, Haderslev, Odense, Fredericia, Korsør, and Kolding are all connected by regular lines with other ports, and most of them have regular cargo and passenger communications with Copenhagen. Esbjerg and now Hirtshals, as well as Copenhagen communicate with English ports, the three large ports of South Jutland, Sønderborg, Haderslev and Graasten, as well as Gedser in Sealand communicate with Germany. Frederikshavn, Helsingør and Copenhagen are the ports for the Swedish coast, and the first and last named for the Norwegian ports. There are regular fast ferries over the little belt from Fredericia to Strib and from Als to Faaborg, and across the great Belt from Nyborg to Korsør. It must be borne in mind that Copenhagen bears a great percentage of the Baltic Trade.

In 1924 the figures for the carrying trade showed that 10 million tons entered the country and 1.8 million tons left the country, about half of the total being carried in Danish ships. Ferries represent about one-third of the tonnage. Most of the agricultural produce exported to England is carried in Danish ships, and about sixty per cent of the English coal (representing nearly a half of the cargo entering the country) is carried in Danish ships.

It is estimated that the shipping freights represent about 250 million Kroner annually, about fifty per

cent of this being from foreign trade. In recent years the motor ships have found increasing favour and are being built in large numbers at the great ship-yards at Copenhagen. The famous Harwich-Esbjerg boats, the "Parkeston" and "Jylland" have proved the value of motor ships on the North Sea.

CHAPTER IV

EDUCATIONAL AND RELIGIOUS

High-School Movement—A Misapprehension—N.F.S. Grundtvig the National Idealist—The School System—Primary to University—Special and Post Graduate Studies—Life in a High-School—A Daring Experiment—The People's University—The National Church—Religious Liberty—Recent Developments.

THE educational history of Denmark is the history of the High-School Movement, about which so much has been written that there are no fresh facts to discover, however some of the old ones are well worth re-stating, as some very misleading ideas are abroad with regard to their function in the scheme of things.

One little misapprehension must be remarked upon before we proceed to glance at the history of the movement ; the Folk High-Schools have nothing whatever to do with agriculture. The fact that farmers' and peasants' sons and daughters attend them is quite incidental. The original intention of the schools was " Not to teach the people how to make a living, but to help them to live." The curriculum of the average High-School contains nothing directly bearing on the agricultural industry.

On the other hand the schools have had an untold influence on the prosperity of the country by infusing a spirit of idealism and enthusiasm which carried the country through its darkest period. A surprising number of the men holding administrative posts in the Co-operative Movement and in the Control Societies are men who attended the High-Schools in their youth, and there received the necessary mental impetus.

No story of the High-Schools can be complete without some reference to the life and work of N. F. S. Grundtvig, "The Prophet of the North."

Grundtvig, poet, political reformer, clergyman, Member of Parliament, orator, educational idealist, and scholar, performed a greater work for Denmark than he himself could have believed possible. From his original idea has sprung a movement which even to-day is far from exhausted, and which has spread to the New World, where fresh development is even now going forward.

Grundtvig was born in 1783, and spent his early years at his father's parsonage, where he became steeped in the traditions of old Denmark, and learned to love the old Norse literature, which he later translated for the benefit of his countrymen.

After the Napoleonic Wars Denmark was in a state of absolute depression. The people became entirely apathetic to all affairs save their own, and complete national stagnation was the result. There was a crude system of primary education, but the old Grammar schools were very exclusive and the University was little better than a professional school.

Inspired by the Romantic Movement which had first reached Denmark via Germany, Grundtvig plunged into the study of Northern philology and early literature and published voluminous records of his researches. So vivid and brilliant was his style that he was hailed as a rising scholar who would re-establish Denmark in the world of letters.

To the amazement of his friends Grundtvig left Copenhagen and returned to his home. For a time he suffered from a form of insanity akin to religious mania. He continued his literary and historical researches aloof from the affairs of the world until with what seems to have been a sudden burst of inspiration he realised that literature and history were not dead studies but records of life. A sudden change took place in his whole outlook. He saw his country sinking into sloth and apathy. He realised that the Classical tradition in education which had persisted from the Renaissance had caused a cleavage between the classes, dividing the people into "educated" and "uneducated," and he forthwith attacked the immediate problem of the revitalisation of Danish ideals.

Free educational establishments, where history, languages, economics and literature could be taught and discussed, were, he said, the fundamental needs of the people. His dream-school should be rooted in the national traditions of the people. He believed implicitly in the splendid potentiality of the spirit of the Nation. There should be no examinations, and all teaching should be by the "Living word"—the actual spoken word.

Though he worked for half a century for his idea Grundtvig did not actually found a school himself. This was done by a group of his admirers who commenced in a little town in Jutland in 1844. Seven years later came Christian Kold's venture, successful in face of most utter poverty.

The war of 1864 robbed Denmark of a province, but provided the impetus for a great national movement, and in the ten years following the war the High-Schools rose in number from eleven to fifty-four. The rest of the story needs no telling. Grundtvig has been, and still is, Denmark's inspiring genius. Without Grundtvig and the traditions he founded of high-minded national idealism Denmark would still be an insignificant land making a precarious living from her poor soil and exporting her manpower to the New World.

We have already referred to the enormous sums spent on education in Denmark at the present day. A review of the facilities provided would no doubt be of interest.

A boy can proceed from the village school to a Doctorate at the University, if he wishes it, without his parents being involved in any expense apart from his personal needs—even his board and lodging may be provided free under certain circumstances.

The country has 4,500 schools, with about half a million pupils. Any of these children may pass from the primary to the "Middle-School" where they may take the examination which gives access to the Civil Service. Three further years at the "Gymnasium" conclude with the "Student

examination " which entitles the holder to entry to the University. There is only one University—that of Copenhagen—though a scheme is afoot to establish a second one at Aarhus. There are seven Faculties, the minimum duration of the course being five years—and the maximum (for Arts or Medicine) eight years. Most of the lectures at the University are public.

The State College of Engineering, the Technological Institute, the Royal Veterinary and Agricultural Colleges, the High-School of Commerce, and the various training colleges for teachers complete the list of institutions for higher education. In all cases the standard is high and the diplomas awarded are badges of outstanding merit. Music, Architecture, Painting, Pharmacy, and Dentistry have separate establishments. The post-graduate courses in special subjects and opportunities for research are numerous and valuable.

To return to the High-Schools. Including several specialised schools there are now seventy-nine of these adult educational establishments in the country. Admission is open to all above the age of eighteen ; fees are surprisingly low and scholarships can be obtained easily. The winter course (usually for men only) lasts five months, and the summer course (for women) four months. The total number of students at these institutions in 1924 was 8,100. Generally speaking the Colleges and High-Schools are very well equipped with libraries, and gymnasia. The agricultural schools usually have excellent laboratories, and demonstration rooms.

Life in a High-School is a delightful experience, and one cannot wonder that the young people who go out into the world of work from these schools take with them the spirit of fresh youthful idealism which is a feature of Danish national life which no foreigner fails to notice.

The most daring and original experiment in the educational world attempted in recent years, is the International High-School at Elsinore. Peter Manniche, founder and principal, was imbued with the Grundtvigian tradition. He represents a compromise between the ideals of Rousseau and Grundtvig. Rousseau insisted on a return to nature, irrespective of civilisation, and Grundtvig thought that all civilisation must be founded on a study of natural laws. Manniche holds that given natural surroundings a man acts naturally, and not according to preconceived prejudices. He fitted up an old country house at Elsinore, obtained the Government's blessing and threw open his gates to the world. At various times fourteen different nationalities have been represented there, and the results have justified the wildest dreams. For six years the experiment has been going on, and now the International High-School is firmly established as a link—a small one maybe—but a potentially great one—between the nations of the world.

Askov High-School is called the Peoples' University and its traditions rival those of the University itself. At Esbjerg there is a Socialist High-School and in some centres various religious organisations have established their own High-Schools.

All schools which receive grants from the State are subject to State inspection, and usually some local person is appointed to observe the working of the school, otherwise the principal is free and independent and can appoint his own staff and pursue his own policy without interference.

The Lutheran Church is the Established Church of Denmark, though there is complete religious freedom. This, however, has not always been the case. Before 1849 all Danish subjects were obliged to be members of the Lutheran Church, though special provision was made for Catholics, Jews and others who lived in certain towns. The old order came to be fairly completely disregarded, and headed by a band of men of letters, and scholars, among whom Grundtvig played a part, the nation demanded a reform of the constitution to allow full religious liberty. This was granted in 1849, and resulted in the introduction of civil forms of marriage and burial, and the abolition of compulsory baptism. All subsequent developments have preserved the ideal of complete religious freedom. There are nine bishoprics and about 1,300 parishes; congregations of the State Church elect local councils which have a voice in the affairs of the church.

In recent years there have been two remarkable developments in the religious life of the country. One is the rapid growth of Roman Catholicism; new congregations are being everywhere established and new churches and charitable institutions are being built in many towns. Another, and equally remarkable, development, is the widening breach

between the two sections of the Established Church. These two sections take the names of the "Grundtvigians" and the "Inner Mission." The former adhere to Grundtvig's interpretation of Lutheranism while the latter represent the extreme Evangelical or Pietist section. The Inner Mission movement has gained great strength since the war, and now has a number of exceedingly fine High-Schools under its control, including one of the finest technical High-Schools in the country.

Owing perhaps to the mental strain and excitement of the war period many strange sects have sprung up, and have in some cases flourished and extended their operations. This applies only to the towns, however, for the rural population is now almost solidly Evangelical. It is in the towns that Roman Catholicism is gaining ground, and it is the exception to find the country people sympathetic to the Catholic creed.

The Salvation Army, the Y.M.C.A., and Y.W.C.A., though constituted on slightly different lines from the English models, are making good headway. Several religious bodies have organised Boy Scout and Girl Guide movements under various names, independent of the Baden Powell Scouts, which is an exceedingly popular and non-sectarian movement, active all over Denmark. Some rather high feeling has resulted from the rivalry thus established.

CHAPTER V

SOCIAL

Social Legislation—Economic Conditions—The Eight-hour Day—The Trades Unions—Rural Labour—Wage Basis—Social Relief Schemes—Standard of Living—The Working Class Home—The Family Menu—Hospitality—Alcohol—Happy Home Life—A Disturbing Prospect—Hospitals—Vital Statistics—Housing—Cultural Aims—Interest in English Life and Literature.

DENMARK is famous the world over for its schemes of Social Legislation. For the history and growth of movements of workers' protection, sickness and unemployment insurance and the relation of labour to the community, the reader is referred to the histories of the Danish Trades Union Movement. It is to the development of the Trades Unions in the towns that Denmark owes her schemes for the protection of the economically insecure classes ; the development is almost entirely urban, for the rural areas have seldom any need for protective social measures.

The stabilisation of prices by the elimination of private bargaining with middlemen did much to establish security throughout the various branches of industry connected with agricultural production and exportation, but the conditions for the two decades following the birth of the Trades Unions

were severe for the town workers whose livelihood depended on an unorganised market.

The comparative decentralisation of the population practically confined the operations of the reformers to the Capital, and made their work easier.

In the seventies the workers' organisations made their presence felt. Having studied the teachings of various German social reformers, the men's leaders endeavoured to build up their system of labour organisation on similar lines, neglecting utterly the machinery of co-operation which lay ready to their hand. After a long series of mistakes and years of hardship, the working classes won recognition, and established the position which is practically unrivalled in Europe. Legislation restricting the work of children in factories was passed in 1873, and the provisions were amplified and extended by the Acts of 1901 and 1913.

The struggle for the recognition of the eight-hour day terminated in 1919 with the admission of the principle by the employers, and its general adoption in all trades with regular working conditions.

The Unions to-day embrace about 300,000 skilled workers, a figure which represents a high percentage of the total. Rural labour, always more difficult to organise, is not a very great problem in Denmark owing to the system of apprenticeship, which prevails over the greater part of the country, but there is a fairly strong rural workers' Union. The problem of unskilled labour does not affect Denmark to any great extent, but an organisation exists to represent the interests of this class of worker.

Generally speaking the principle of arbitration on matters of dispute in industry has been accepted by workers' and employers' organisations since the disastrous lock-out of 1899, which lasted three and a half months. In spite of the admission of the arbitration basis of negotiation, there was a great dispute, chiefly on a matter of principle, which lasted well into the summer of 1925.

The level of wages is based on the official cost of living figure, which is revised periodically under State supervision.

Schemes of relief in cases of poverty, old age pensions, and provision for orphans and widows' children lie within the duties of the municipalities, and the funds existing for these purposes are supported partly from taxes and partly from rates, and in every case the funds are administered by the local authority. Sick benefit clubs receive a great measure of State assistance, and are run on a voluntary basis. Provision for unemployment is a joint affair between workers, employers and the State, with contributions from all three sources. The administration of funds is carried out by the Unions under Government supervision.

The English visitor is struck by the extraordinarily high standard of living common all over the country. Despite the fact that the cost of living figure is more than one hundred per cent higher than in 1914, the level of prosperity is astonishing.

The average working-class home in the towns is fitted with electricity and gas, both of which are comparatively cheap. A good deal of electrical

power is imported via Helsingborg-Elsinore, from the Swedish water-power sources, but there are in Denmark 456 power stations, 276 of which are co-operative concerns. Although all coal has to be imported, the price of gas for cooking and household purposes would fill the English housewife with envy. Heating is done by coke stoves, or by steam. The expensive open fire-place is practically non-existent. Wood fuel is extensively used in the country, and its preparation provides a good deal of employment.

The Danes love sweet foods, and various kinds of sweetened and fruit soups thickened with potato starch form a staple course at the mid-day meal in most families throughout the year. Enormous quantities of dried fruits are imported annually. In the homes of Denmark one seldom tastes Danish butter. They make or import vast quantities of high-grade margarine, which replaces butter almost everywhere. Fresh meat does not form a great part of the average menu, but prepared meats, manufactured at the local slaughteries, sausages, and pressed meats provide the *pièce de resistance* at many meal-times. Great quantities of eggs are consumed, and the cheaper varieties of factory made cheese supply a great demand. Coffee is the national beverage, and sweet cakes, including the typical Danish products—"Vienna bread"—and whipped-cream dainties—are amazingly cheap and exceedingly popular.

No more hospitable people are to be found than the Danes. A stranger is requested to "drink coffee" with a score of people daily, and one often

finds that the poorer the people the more lavish is their hospitality. In the "good old days" when cheap spirits ("snaps") cost about 4½d. a bottle, huge quantities were drunk, and the official returns for the estimate of the cost of living figure included one pint of spirits daily as one of the necessities of life in the labourers' household. In those days the Danes were famous drinkers, but now all that is changed. The imposition of high taxes on alcohol and the growth of the temperance movement has reduced the consumption to a tenth of its former figure. Spirits which cost 4½d. a bottle a dozen years ago now costs 8s. 6d. Drunkenness is almost non-existent and one of the reasons is the lack of restriction in the hours of selling. There is no "drinking against time." The cafés are open all day long, and often until 11 or 12 o'clock at night for the sale of liquor.

In the country the voluntary temperance movements have spread to such an extent that the old country inns can easily cope with the demand in spite of the increased population and prosperity. A scheme is on foot for a referendum on the question of Prohibition; general opinion is that the urban vote for freedom will have some difficulty in equalling the anticipated rural majority for prohibition. The reversal of Norway's Prohibition policy in 1926 had a great effect on Danish popular opinion, however, and it is now unlikely that the supporters of the Prohibitionist policy in Denmark will pursue their demand for a referendum.

The Danes are a contented race, with a happy home

life, ample leisure, and often highly cultivated tastes. The High-Schools and the co-operative organisations have fostered a love of national life, literature and institutions that nothing can shake. The peasant in his comfortable cottage with his shelf of books, electric light, telephone, his productive acres and assured future, is a figure of contentment and stability which has no equivalent in modern Europe. It was this spirit which kept the country steady when an economic crisis was threatened during the war. It is a common jest among the Danes that 1917 was the only year when they were compelled to eat their own butter and bacon.

In yet another department Denmark leads the way, that is in regard to the Hospital system. The voluntary basis is practically unknown, and the hospitals, which represent a high degree of efficiency, are financed by the State and the municipalities.

One alarming feature of recent years is the increase in the cancer death-rate, but this is more than balanced by the reduction in the general death-rate, which is one of the lowest in the world. The population in recent years has increased at the rate of about one per cent, or about 30,000 per annum. The last quarter of a century has witnessed a decline in the death-rate of 3.2 per thousand, and an increase of five years in the mean duration of life. The birth-rate has also fallen, and with it the figures for illegitimacy, which were formerly high. The emigration statistics show an annual figure of about 6,000; most of the emigrants find their way to America, where, we may mention in passing, they

have founded co-operative institutions, and High-Schools on the Danish plan with a great degree of success.

Denmark boasts the lowest tuberculosis death-rate in Europe. Quarter of a century ago 6,000 died annually from tuberculosis; now, with a population 40 per cent. greater the total annual death-rate from this cause is 3,000.

The urban housing problem in Denmark has been solved by the erection of great blocks of flats. Rents are controlled and limited to seventy per cent above the 1914 rate, compared with a cost of living figure which is 120 per cent above the pre-war level. The houses and buildings erected for the occupation and use of the new class of smallholders are invariably roomy and convenient. It is not uncommon to find a seven, eight, or ten roomed house on a twenty acre holding. Buildings are on the same scale, usually fitted with electric light and power, and perfectly ventilated and drained.

The various youth movements growing from the Scout idea have done much to further social progress; and amateur competitive athletics and sport organisations (all of which are borrowed from England) have developed the younger generation along the lines of fair and equal citizenship and fair play. Gymnastics and physical culture for both sexes provide recreation and scope for the development and mental and bodily qualities.

The library system also founded on English models, has also proved of immense social advantage in bringing good literature not only Scandinavian, but English,

French, German and Italian within the reach of the poorest people. The libraries are staffed by persons—often University graduates—who can advise and recommend courses of reading to patrons and users of the libraries. Englishmen and Americans have often been obliged to hide their heads in shame when some young shopman or labourer has begun to discuss the merits and style of Kipling and Hardy, Jack London or Hergersheimer.

One is surprised to find English editions of popular works in the shop windows even of the smaller towns; Sir Hall Caine and Kipling are immensely popular and thousands of Danes read their works in the original, and are prepared to discuss them in English.

Village libraries and courses of lectures in the local assembly halls provide intellectual food for the rural population.

The level of social and cultural development in Denmark amazes all observers, and it must be seen to be believed.

CHAPTER VI

CO-OPERATIVE ENTERPRISE

Co-operation of English Origin—"The Rochdale Plan"—Danish Adaptations—The Period of Crisis—How the Co-operative Idea saved Denmark—Early Experiments—Origin of the Co-operative Dairies—Arable Dairying and the Bacon Industry—No Propaganda Necessary—National Idealism—Purely Economic Movement—Internal Organisation—Statistics—The Co-operative Slaughteries and Bacon Factories—Egg Export—Co-operative Purchase.

ADMITTEDLY Denmark could not have achieved anything approaching her present state of efficiency and prosperity without the aid of co-operative machinery, but the tendency among many writers and speakers is to refer to Denmark as the home of co-operation, and a shining example for the rest of the world to follow blindly.

As a matter of fact Co-operation is a purely English institution, which was not heard of or thought of in Denmark until a quarter of a century after the establishment of the English Co-operative movement on the "Rochdale Plan." In England the pioneers of the movement had learned by the experience of Dr. William King. King's experiment at Brighton necessitated a weekly subscription from members and the profits went to a common fund and were not

accessible to members, but the Rochdale men went to work with a mass of ideas, social and practical. Basing their system on the employment of members in production they worked both ways—forward to the distribution of the finished article, and backward through the production of raw materials to the ownership of the land. This scheme took a man into account both as a producer and as a consumer, and aimed at the ultimate foundation of a self-supporting colony of individuals with common interests. There is no necessity to refer to the subsequent growth of the movement in this country.

With this example before them Denmark had only to adapt the idea to her own particular needs. To Denmark belongs the credit of being the first country to apply the system to the needs of agriculture.

The ground was ready and waiting for the seeds of co-operation. The war of 1864 had left her poor and desperate. The production of corn was becoming yearly less profitable owing to the increasing supplies from America and Russia. The moment was opportune ; farmers were poor and looking for some more profitable outlet for their energy. The actual crisis which necessitated their changing their whole scheme of production did not arise until the eighties, and by that time co-operation and the wider outlook—fruit of the High-School movement—were firmly established. The period 1864-1884 must be looked upon as the basis of all subsequent growth.

1866 saw the birth of the first co-operative experiment, inaugurated by " Parson Sonne " at Thisted. There had been vague beginnings before, but nothing

of note. Although progress was slow at first the idea caught on and spread, first as an agency for co-operative purchase of seeds and implements and common household articles, then as a means of obtaining credit by joint guarantee and, in the early eighties, with the foundation of the first co-operative dairy, as an organisation for manufacture and sale. The irregularities which had existed previously in regard to quality of produce, prices, and conditions generally, began to disappear. Private traders came into line, and a common basis of trading was accepted practically throughout the country.

From 1885 we must think of arable dairying as the basis of Danish agriculture. This system meant a vast increase in the output of bacon and in 1887 the first co-operative bacon factory came into being. No propaganda was necessary to ensure the rapid progress of co-operative organisation. The system commended itself to the producers because of its practical value and its future was assured from the outset.

The details of the workings of these organisations have frequently been discussed before, and here is no place for the technicalities of the business. The societies were run on purely economic lines, yet the Movement is animated by a great national idealism which finds its expression in the perfection of the schemes and of the products; in other countries social and philanthropic activities often grow up alongside the work of a co-operative association. Not so in Denmark. The organisations confine their attention to business and on the committees

one finds men of every shade of political and religious conviction working together in complete harmony. Judicial disputes are almost unknown and the movement has taken no part whatever in the "class struggle." The idea has always been to improve the economic conditions of all by efficient administration and impartial dealing, and to market produce at the highest standard of quality attainable.

The general procedure adopted in regard to the formation of a co-operative business is that the suppliers jointly guarantee the necessary capital on a basis proportionate to their estimated supplies. A manager is appointed, and the authority to which he is responsible is the general meeting of members, at which each member has one vote irrespective of the amount of produce he supplies to the concern. The manager's duties include the supervision of the entire business and the sale of the finished product. In the case of the dairies the latter proceeding is accomplished through the Co-operative Export Societies which deal with the produce from the time it leaves the factory to the time it reaches the importer.

It must not be imagined that co-operative enterprise accounts for the entire trade. Some private firms, which deal chiefly with the large estate farms, carry on business in close imitation of the methods adopted by the co-operative organisations.

The Co-operative Dairies form the most important economic group in the country. Approximately 185,000 farmers, out of a total of 206,000, are members of such organisations; this represents

practically all the small and middle-sized farms, and about eighty-six per cent of the dairy cows of the country. The total number of co-operative dairies exceeds 1,400 and of these 546 are members of eleven butter export societies. A number of dairies exist for the purpose of preparing dried milk and preserved cream for export. During the war condensed milk factories were formed, but when the combatants ceased to need the produce for the troops the concerns collapsed and some millions of Kroner were lost. A similar fate befel a firm which commenced exporting potatoes to England, during the food-shortage period here, two shiploads were emptied into the sea owing to their condition, involving the offending exporters in great loss.

The Co-operative Slaughteries control over eighty per cent of the entire export of bacon, and by-products of pig-breeding. Over seventy per cent of farmers, and about seventy-five per cent of the pigs of the country are represented by the fifty Co-operative Slaughteries. The closing of the German market to live pigs was responsible for the initial development of the co-operative slaughteries. At that time (1887) a number of private slaughteries were in existence, and these offered very strong resistance to the new movement. But the farmers, noting the success of the co-operative dairies transferred their allegiance from the privately owned concerns to the co-operative movement.

The administration of the slaughteries is in many ways similar to that of the dairies, but members have the option of seven, eight or ten year periods

of supply. The organisation of the slaughteries is stronger than that of the dairies, as all the co-operative concerns are members of a central body with an office in the Capital which controls wages, fixes prices, assists with advice in matters of pig-breeding and feeding, and performs other useful work.

As long ago as 1890 England was the chief customer for Danish eggs. An English trade newspaper of that period once wrote: "The Danes, who are themselves fond of good food, demand that we shall shut our eyes and hold our noses when we approach the eggs they send us." That was the reputation of the Danish eggs in those days. Methods of collection and sale were very haphazard and no particular care was taken to market a satisfactory product. The possibilities of this side of rural industry were neglected until the Danish Egg Export Society was founded in 1895. This centralisation of the industry had a great effect on the quality of the eggs exported and the market consequently grew. There are now about 650 local egg "Sales Groups" and fifteen packing centres under the control of the Central Co-operative Egg Export Society. This represents 45,000 members and twenty-six per cent of the poultry stock.

Manure, feeding stuffs, machinery and seeds may all be purchased co-operatively, and an average of one-third of the Danish farmers obtain their supplies through co-operative sources.

CHAPTER VII

CREDIT AND INSURANCE FACILITIES

The Credit Pivot—Extensive Mortgages—The Landschaft—Early Loan Systems—The First Co-operative Credit Movement—State Help—Financing the "Husmænd"—A Practical Example—Agricultural Bonds on the Market—Co-operative Insurance—Slow but steady Growth.

THE Co-operative Credit Societies form the pivot round which the whole machine of Danish agriculture revolves. One startling fact with which students of the Danish Agricultural system come in contact is that nearly fifty per cent of the farmers' land is held on mortgage. This does not suggest the slightest degree of financial insecurity, but merely indicates the extent to which the credit facilities are taken advantage of. .

In Denmark a mortgage is not regarded as the last resource left open to the farmer, but a reasonable and legitimate method of business.

Attempts have been made to prove that the Danish system of co-operative credit for agriculture derives from the German "Landschaft," but this theory is quite disproved by the facts. The Landschaft was primarily established to provide fluid capital for running the estates of the nobles, and it took many years for the machinery to embrace the

actual farming class. Now however the financial needs of the greater part of rural Germany are supplied by this organisation.

The beginnings of the Danish Co-operative Credit System were much earlier than the corresponding movements across the border. Before 1840 there had been signs of activity among the farmers and peasants, and many were clamouring for better buildings and more opportunities of draining and developing their land. But the farmers were poor, and the only sources of capital were the banks and private financiers. The terms obtainable were quite useless to an agricultural community. In the first place it was practically impossible to negotiate a loan for more than ten years, and interest ranged up to seven per cent or more. There was a general feeling of restlessness and in 1845 a great meeting was called which was representative of the farmers' interests throughout the country, and there it was decided to form a Credit Society which would provide long period loans on easy terms. The committee which sat to formulate a scheme reported that progress was impossible unless the Government could help; one suggestion was that the Bonds of the proposed Society should be free of Stamp Duty. Five years later this suggestion was complied with, and the Government promised assistance to the Society to the extent of 10,000 Kroner as a basis for the fund. The Act of 1850 provided for the establishment of valuation committees (one member on each committee to be elected by the Government), and further gave the Society the right to take

over and manage or sell farms for which the repayment sums were not forthcoming, without reference to any court.

The first society was formed in the same year, and the following decade witnessed the establishment of ten more societies. The new movement weathered a very bad storm in the fifties and in 1861 the basis for the formation of societies was revised and the possibility of a multiplicity of small societies was eliminated by the imposition of a minimum joint guarantee of 10,000,000 Kroner. There are now a dozen such societies; each has a committee of members which forms the management and the State supervises the transactions.

With the rise of the labouring class (*Husmænd*) to the position of smallholders a fresh problem arose as to how to find ample security for loans for this type of farming. For a long time it was thought any credit scheme for smallholders would be an economic failure, but in 1880 the State created two Credit Associations for Smallholders, guaranteeing initial costs and the interest payable on bonds. This scheme worked well, and when in 1899 the number of small holdings was multiplied by Act of Parliament, loans up to nine-tenths of the total cost of the holding were advanced to intending purchasers. In all cases the terms of repayment were easy, and in the case of the smallholders the first five years are freed of capital repayment, and after that period only three per cent is demanded in addition to interest.

Let us take an example. A farmer wants to buy

a holding. The Valuation Committee fixes 100,000 Kroner as a fair price. The farmer goes to the credit society and there gives his I.O.U. for three-fifths of the total, and comes away with 60,000 Kr. in Bonds. These are sold on the Exchange at current prices ; they are sixty year bonds, issued at $3\frac{1}{2}$ or $4\frac{1}{2}$ per cent, and the security is that of the Society. The second mortgage is for seventy-five per cent of the remainder, and is obtained from another society at a slightly higher rate and a shorter repayment period. If necessary a third mortgage can be arranged for the remainder for a fifteen year period at six per cent. In practice the money is not actually paid back at the expiration of the loan period, but is kept for purposes of improvement.

A remarkable fact is that the Credit Society Bonds rank with State Securities on the money market, and the small holders' bonds rank even higher. Before the War France held 400,000,000 Kr. and England 250,000,000 Kr. in these bonds, but Denmark was so prosperous during the war period that she was able to redeem them.

Another feature of interest in Denmark is the rapid development of co-operative live-stock insurance. In the past the efforts in this direction have been disappointing, but the percentage of stock insured increases gradually from year to year. The peculiar value of schemes of live-stock insurance is the information they reveal regarding disease in stock, and in a land which, like Denmark, is particularly prone to repeated epidemics of Foot and Mouth disease, this question is a vital one

Experience has shown the value of such work in relation to tuberculosis in milking stock.

But co-operative insurance is not limited to stock. Fire and accident is covered ; damage by hail or blight and other contingencies are provided for. Limited though they are in scope, the Insurance activities have revealed many interesting facts and figures which have led to the solution of several important problems.

CHAPTER VIII

LAND CULTURE AND PRODUCTION

Attention to Detail—Scientific and Experimental Progress—Rigid Economy—Elimination of Waste—Feeding the Land—Fight with Sand and Heather—The Story of Dalgas—Heath Reclamation—Afforestation—Rich Fünen—Crop Rotations—Grain Producing for Milk—Increase in Stock—Sugar Beet—Potatoes—Seed Growing and Market Gardening—Allotments and Flower Culture.

THE word "intensive" is so hackneyed that it scarcely conveys the degree of intensity with which the Danish agricultural methods have been developed. Close attention to detail characterises every branch of the industry. From the laboratories of the great Agricultural High-Schools to the garden of the smallest holding in the country the same fact applies. Scores of colleges and experimental stations are constantly engaged in the investigation of new methods of getting the best out of the land. Land economy is indeed a fine art in Denmark. The country is small and there is not an acre to spare. Not a single square yard is wasted. For many miles in Jutland there is not a hedge in sight; they are unnecessary and uneconomic, so the Dane has dispensed with them, entirely in some districts, and partially in others. The boundary line between

farms is sometimes marked by a fence, sometimes merely by a narrow line of unbroken turf. There are no straying cattle, for the grassland is too valuable to be spent by trampling and wasteful feeding, and the herds are tethered in the fields. The farmers know exactly what quantities and proportions of food are necessary for the best production of milk, so the cattle get the right quantity and no more. There is practically no permanent pasture as we know it in this country, and the results justify the extra expenditure on land culture and labour. The cattle in the grazing season are watered in the fields; they are milked three times a day, and the tether pegs are moved four or five times a day.

The land is fed according to the latest scientific methods. Lime and marl are plentiful, and transport charges for these materials are lower than for other goods. Each year about £3,700,000 worth of fertilisers are imported, and great schemes of land drainage and heath reclamation are continually in progress.

The story of the fight with the sand and the heather on the windy heaths of Jutland is an epic, and the hero of the story is the late E. M. Dalgas, the founder of the Danish Heath Society, who was one of the greatest benefactors of his country in any age. Owing chiefly to his enthusiasm and energy about 3,700 square Kilometres of land have been won for cultivation.

Day by day throughout the year a small army of men may be found at work on the dunes along the North Sea coast, planting marram grass and building

barriers to prevent the invasion of the fertile land by acres of shifting sand.

Afforestation has been developed to a high degree all over the country, and particularly in Jutland. For many years reckless felling of timber had been carried out, and the hills were nearly denuded when the State stepped in and prevented further waste. In 1881 the percentage of the country covered with woodland was 5.3, now it is 8.5. This change is chiefly due to the work of the Heath Society.

The extensive schemes of reclamation have necessitated great irrigation works to replace the old water wheels which for many years served inadequately the needs of the land. The bog land which lies in the folds of the heath has in many cases been drained, cleared, and rendered fruitful. Much of the peat which is dug out of these boggy areas has no commercial value, but is used for litter by local farmers.

By a great piece of good fortune valuable marl deposits are found quite near to the scenes of reclamation, and the generous Government assistance in the construction of special marl tracks and the reduction in railway transport fees has enabled the Heath Society to develop reclaimed lands at a comparatively low cost per acre.

One of the chief obstacles to the progress of the reclamation schemes in the early days was the attitude of the peasantry. The common opinion was that the heath land was utterly valueless, and that any schemes for bringing such land under cultivation were proof of the imbecility of the

promoters. It was only the persistence and the dominating personality of Dalgas which carried the idea forward in face of ridicule and, in some cases actual hostility. So confident and optimistic was he that he was able to interest many rich men in his schemes and to persuade them to buy heath land and to plant it at their own expense.

There is still much work for the Heath Society to do, but year by year the stubborn wind-swept wastes are being reduced in size ; for many years to come the parent society and the scores of smaller societies under its direction will find ample scope for their activities.

The richest land in Denmark is to be found in the island of Fünen ; here the appearance of the landscape approximates more closely to that of England. Here one finds hedges and country lanes wide park lands and ancient woods. The land undulates gently, and in the folds of the land old-fashioned black and white farmhouses and cottages and picturesque villages nestle behind the inevitable windbreak belt of trees. The land is very fertile and yields heavy crops under the scientific system of feeding and rotation to which it is subjected.

When dealing with the rotations it is necessary to bear in mind that the whole system centres on milk production ; and science and practice work hand in hand with that one object in view. When we remember this we shall not commit the fallacy of making direct comparison with the English arable practice, or that of any other country where the ultimate object is different. In the first place

Denmark imitated the Scottish plan of cropping, and from that plan the Danes have built up the system which experience proves to be the most suitable for their particular needs.

Only the rough heathery slopes and the strips of land along the coasts of the innumerable inlets and fjords can be classed as permanent grazing land ; consequently sheep play very little part in the stocking of Danish farms ; the few sheep one finds on the farms are usually in the home paddocks with the rearing calves, and are killed for home use, or for the local market. Wool forms a quite insignificant article of production.

In some parts of the country fallow has been completely dispensed with, in others it is still adopted as an essential part of good husbandry. We may differentiate between various classes of farming for the purpose of illustrating the main differences in rotation. The table at the end of the book will illustrate the generally adopted eight-year rotation.

By far the larger percentage of grain grown in Denmark is fed to the stock, and very little is left over to place on the market for human consumption. Enormous quantities of feeding cakes and meals are imported ; the annual figure thus spent averaging well over £13,000,000. On the farms where power is installed, and a crushing mill can be used with advantage a good deal of mixed corn (" dredge ") is grown, and crushed for the pigs. Peas are grown and crushed for the horses, and all manner of green crops are produced, lucerne being the most popular.

Very little hay is used; the first crop of lucerne is usually harvested, but for the rest winter feed is made up of roots, cake, meal and chopped straw. The experiments of the scientists have resulted in the discovery that—weight for weight—roots are more than twice as valuable as hay for feeding purposes, and more than seven times as valuable as green feed. Straw has about one-fifth the value of roots.

There is a Danish saying to the effect that the pig hangs on the cow's tail. The meaning is obvious; arable dairying means ample supplies of skim milk for pig feeding, and the breeding and feeding of pigs for pork and bacon has been developed amazingly in recent years.

It speaks for itself that since the present system of land culture was stabilised in the eighties the number of live stock per acre has increased in a surprising ratio. Compared with half a century ago Denmark carries double the stock of cattle and five times the stock of pigs, while poultry culture has quadrupled. Cropping has increased in proportion. An average over the years 1876-79 shows a total grain crop of 2,708,000 tons, while the 1924 crop yielded 6,363,000 tons. The home crop must be supplemented to the extent of close on thirty per cent of feeding stuffs and grain to meet the needs of the stock. The only crop which shows any considerable export surplus is barley.

Sugar beet forms a large percentage of the total output of roots. The crop is exceedingly valuable in a dairying country, for apart from providing an opportunity of cleaning the land, the pulp and

wurzels form useful fodder. The area under sugar beet is nearly as large as that under wheat, and the home demand is met in an average year, often leaving a margin for export. Potatoes do not form a large export item, and the crop is not constant ; the home demand is large, and a good proportion of the crop is used as fodder. The manufacture of potato flour is a growing industry, for at present large quantities are imported annually.

In round figures the harvest is composed of fifty per cent grain, forty per cent root crops, and ten per cent hay, etc.

Climatic conditions make it necessary for cattle to be kept in the shippens for a rather long period of the year, and this leads to the accumulation of large stocks of natural manure. This is supplemented by very large imports of fertilisers, and the land is everywhere well fed.

One more significant figure may be quoted : The amount of grain and feeding stuffs imported is four times as great as the quantity produced for home consumption.

An agricultural sideline in which much co-operative capital is invested in the production of farm seeds both for home use and for export.

Market gardening on a large scale plays very little part in the Danish system owing to the comparative decentralisation of population, and also to the growth and popularity of the allotment idea, by which urban dwellers supply a good proportion of their own garden produce by their own labour. Every town has a " *Coloniehave* "—a great patch of

ground devoted to allotments where each plot has its "Summer-house." Many families migrate to these gardens in the summer months, and live there until the autumn winds make them seek the shelter of their own town homes. Of the thousands of such plots which the writer has seen there has not been a single instance of weedy, dirty soil or any other signs of insufficient attention or lack of interest.

The Danes are great flower-lovers, and the demand for hothouse plants for home decoration keeps an army of expert gardeners employed throughout the year in the neighbourhood of the towns.

CHAPTER IX

EFFICIENCY, ORGANISATION AND CONTROL

Control Societies and their Work—Advice on Stock Breeding and Treatment—Origin and Growth—Government Grants—Low Costs—Permanent Records—Farm Accounts—Value of Accurate Costing—Extension of the Control System—Pig Breeding and Feeding—Other Fields of Work—The Farm and the Laboratory—How Communication is Established—The Specialised Press—The Pupil-Apprentice—Casual Labour—Transport.

EXPERIENCE has proved that the machinery of the Danish Control Societies is absolutely invaluable in ascertaining the relation between the consumption of each animal in a dairy herd, and the milk yield, both in terms of quality and of quantity, and further the economic relation between the cost per head of stock and the return. These societies, which are the models upon which the English Milk Recording Societies were founded, have proved so effective that the idea has been adopted by Germany, Holland, the United States and other countries.

The Control System in Denmark is linked with educational development, and the section devoted to the improvement of farm accounts might well take as its slogan "Better Agriculture, Better Business." The "Control Assistants"—the officials

of the Society—are in every case highly trained experts, able to advise and direct on matters of breeding, feeding and treatment of stock with a view to improving returns. Such individuals are not chosen by chance or influence, but on the basis of their actual record in practical and scientific work.

The first Control Society was founded in 1895 in South Jutland, and now there are 1,039 such bodies with nearly 30,000 members, representing twenty-eight per cent. of the total dairy stock of the country (over fifty per cent of the cattle on the island of Fünen). Government grants are awarded to the Societies which comply with the conditions laid down. To quote the conditions :

“ The object of the Control Societies—is to investigate and promote the profitableness of animal husbandry on the basis of tests of feeding, and on milk yield, and fatty contents of the milk of individual cows, and to promote the breeding of strains whose milk will give an increased butter yield.” . . . “ The Society shall give an annual report containing an accurate list of the name and number, date of birth, sire and dam, of every cow registered in the Society, and showing the milk yield of each one (quantity and fat percentage) and the feed consumed, as well as the date of birth of the calf, its mark, and the use to which it has been put.”

These annual reports are co-ordinated, and the results compared and subjected to a penetrating analysis which is eventually published together with any recommendations for the improvement of stock or feeding methods either for the country generally or for particular districts.

A rough estimate of costs of this service gives the figure of about 4s. 6d. per cow per year as the average for the whole country.

The working of the system takes the following form: a group of farmers agree to found a society and elect a control assistant. This individual attends about once every three weeks for a whole day at the farm of each member and watches the feeding and the milking. The day's milk yield is weighed and the amount recorded, the fatty contents are ascertained by means of the famous Gerber apparatus. Feeding is based on a "Feed-unit" which was arrived at by reducing, by scientific methods, all cattle feeding stuffs to a proportion of the feeding value of one Kilo of Danish barley. (See tables.)

It is impossible to overestimate the beneficial effect of the work of the societies on the matter of breeding. The selection of the best milk strains is rendered easy by mere reference to a statistical return published in the official herd book, instead of being left to the individual judgment by appearance. We may mention in passing that the system of purchase on the basis of records has eliminated the "cattle dealer" from Danish agricultural society, thus relieving the industry of a very considerable charge.

Farmers are notoriously bad book-keepers, but in recent years the work of the Control Societies and of certain individual enthusiasts and their scores of voluntary helpers and fellow-workers, has resulted in the raising of the standard of agricultural accounts.

The study of cost accounts has been made a speciality of the Agricultural High-Schools, and now there are few farmers who do not keep accurate and intelligible accounts of all their transactions. The value of the results is inestimable. For example, one investigator has been able to prove by means of the accounts kept by smallholders that the average of productivity and economic efficiency varies inversely as the size of the holding down to the area of about eight acres, beyond which limit he is now investigating with the figures at present obtainable.

The value of the Control System as applied to dairying suggested the extension of the scheme to other fields of work, and the result has been a remarkable increase in the economic efficiency of pig-breeding and feeding, seed growing, horse rearing and root cultivation. The movement is still extending and is likely to do so for many years to come.

The connection between the research and experimental stations and the farmer is a matter to which Denmark has paid close attention. The results of practical and scientific experiments are in the possession of the farmer almost as soon as they are established. In this way no time is lost in circulating news which may tend to increase productivity or efficiency or lighten the load of labour in some direction. There is a very fine Press for the rural population. Daily and weekly journals devoted almost exclusively to the affairs of the rural population find their way into every home ; often enough these publications are supported by advertisements and are distributed free of charge. The daily Press

of the country reflects thorough understanding of the farming industry and serves to effect a degree of sympathy between the rural and urban populations.

Under this chapter heading a little more should be said about the rural labour problem. In Denmark, as in no other country, the problem has solved itself automatically. One can safely say that throughout large areas of Denmark the agricultural labouring class is non-existent. Young men who intend to devote their lives to agricultural work, go out as "experience-seekers" and work for comparatively low salaries at the larger farms, living with the family on the same social level. When the time comes that they feel themselves thoroughly proficient in one type of farming, they move to another part of the country where they can work under other conditions and observe other methods. Thus eventually they become completely qualified to apply for possession of a holding. This they can do on the production of a tenth of the purchase price—or even less in many cases—and they can proceed to work out their own independence on their own land. This system solves the double problem of labour costs and individual efficiency. The man has an intense personal interest in the work and is willing to pay for his experience by accepting a lower wage than would be demanded by a regular labourer.

The problem of casual labour in the "rush seasons," particularly in the root harvest, is solved by the importation of Polish labour. The workers Unions have insisted that the same minimum rate

should apply to the imported workers as to the regular Danish labourers. This feature is steadily diminishing, and the day is not far distant when the rural labour problem will have been finally solved so far as Denmark is concerned.

A word about Transport—always a vital question of agricultural economy. Denmark does not have to consider the supply of produce to the towns to the extent that other countries must. Their plan is—Producer-Exporter, instead of Producer-Wholesaler-Retailer-Consumer, with agents and dealers taking further toll from the meagre return which eventually finds its way into the pocket of the average English producer. The Co-operative Societies in the towns have attacked the problem of the elimination of the middleman and have found the problem almost insoluble, but the home market is inconsiderable in comparison to the export trade, therefore we may expect particular attention to be paid to transport, and other allied problems. Two examples will illustrate the method generally adopted : Milking is carried out three times a day. Churns with the milk are placed at the farm gates, where they are collected by the employees of the dairies with fast motor lorries ; a few hours later the churns are returned with the equivalent quantity of skim milk for feeding to the pigs.

Take a second example : In South Fünen there is a large sugar factory, which owns scores of miles of railway line in the surrounding country. This line is used solely for transporting agricultural produce, sugar beet in season, and other goods in the off

season. The farmer reports to the factory what area he will have for beet in the coming year ; a contract is signed ; workmen employed by the factory do practically all the work on the crop, lift and clean the roots, load them on the wagons with the possible assistance of the farmers' horses and men, if the line is any distance away. And there the farmers' responsibility ends, and he waits for his cheque. The profits on sugar beet vary considerably but on the whole they are well worth growing.

That is how everything is organised in Denmark. The country is efficient all through. Slackness is regarded as a strange disease. People work long hours in the country, but they take a long mid-day nap, and always have a time for a gossip or to dispense hospitality. They love their country with a passionate love, and they treat it as if they loved it.

CHAPTER X

DEDUCTIONS AND SUGGESTIONS

WHILE admitting all the fundamental differences which make comparison difficult between the Danish agricultural system and our own, there are in fact many points upon which we may gain by reference to Danish experience. Mere slavish imitation of existing Danish institutions is utterly futile. As I have pointed out elsewhere, the experience of generations, the result of years of growth and trial cannot be transplanted wholesale into another country and superimposed on the existing system with any hope of success.

The old problem that has troubled this country since the repeal of the Corn Production Act and the change from the profitable war-time conditions of the industry, is to what extent the State can assist it to recover. From time to time suggestions, sometimes plausible, sometimes hopelessly impracticable, are made. Safeguarding and Protection are often urged as providing the only remedies, but the ramifications of the industry at home are often lost sight of. Protection of one side of the industry would open the door to legitimate claims from a hundred and one other branches, each with reasonable claims for consideration. Too often

we base our estimates on the figures relating to wheat production, neglecting the fact that wheat is no longer of prime importance in our system of agricultural economy ; one may safely say that only a quarter of England and a still smaller fraction of Scotland is now interested in wheat growing. Now that we are reconciled to the fact that milk is playing a greater part than either corn or meat compared with earlier times, we must try to find a factor at the "base" of the industry which if in receipt of artificial aid, would affect beneficially the entire industry. The only factor here is stock-breeding, for which this country has always been famous if not pre-eminent. The milk industry at the moment is undoubtedly the most prosperous, and if the town populace can be imbued with a little more confidence, and is not led away by wild stories of microbe infested poison being sold, there are hopes of a widely extended market for fresh milk and also for factory cheese and butter. The dairy industry can to a great extent take care of itself ; the excess production bogey is not so fearful as many would have us believe.

The suggestion I would now make is calculated to assist the stock-breeder, the farmer who prepares stock for the meat market and the dairy farmer as well as the mixed farmer. Its greatest recommendation is that it could come into operation almost immediately and the effect would be prompt and effective. Also one is tempted to hope that it need only be a temporary measure. The suggestion then is a tax on imported meat, and restrictions regarding

the importation of stock. I introduce these suggestions apologetically, as I am a Free Trader at heart but the exigencies of the situation call for the sacrifice of principle, and such measures as I suggest are temporary, and calculated to tide the industry over the present crisis while some solid groundwork is being done both in research, propaganda for home-produced foods, co-operative buying schemes, co-operative transport and distribution and so forth.

The suggestion needs some elaboration perhaps. A tax of 2d. per lb. on foreign meat, and 1d. on Colonial, would mean a very great help to the industry temporarily, while adding something like eighteen millions to the Exchequer. The effect on the household accounts would not be very severe, and a reduction in the taxation on other foodstuffs could remedy this disturbance of the housewife's accounts.

Then in regard to the importation of live store cattle, from what ever country they come they should not be permitted to be driven straight to the abattoirs and turned into meat. This means that they have already been prepared for the butcher in the land of their origin. This could be overcome by a provision preventing the slaughter of animals until six weeks after their arrival.

Both suggestions are bound to be unpopular, but in view of the urgency of some temporary measure for the relief of the harassed farmer this is at least practical, possible, and it holds forth the prospect of temporarily stopping the rot while the real experts, the practical men, and not the politicians or

theorists, find some permanent means of reviving the most vital industry of the country.

Along with these suggestions we must consider the supreme urgency of cheaper transport for agricultural produce. Transport is an ideal field for co-operative enterprise among the farmers themselves, but as a temporary measure while such organisations are being formed some form of subsidy to the railways for the transport of all forms of agricultural produce might be regarded as imperative.

When we consider the possibility of a "scheme" for agriculture as a whole we are at a loss to find an organisation that represents the entire industry. The existing organisations are sectional and limited in scope, and often political, if not officially, at least in sympathy. Our experts are hampered by contradictory evidence and by conflict of interests, making the formation of a common policy for all agriculturists a formidable task.

Then again the urban population is naturally opposed to any form of official favour being shown to farmers, and in a country where eighty per cent of the population lives in urban areas it is only to be expected that the rural districts receive less than their meed of attention.

The remedy does not lie in direct State control. It would be a very different matter if some organisation—say for example a Farmers' Union representative of *every* section of the industry—could agree upon a policy of reform, which necessitated State assistance. Then a measure of State

control would be acceptable in return for a proportionate measure of help.

Take the matter of credits. In this country the farmer has usually to look to one of two sources for financial assistance; he must go either to the landlord or to the bank. The landlord is the natural capitalist of the land according to the British plan, but in recent years taxation and other causes have robbed him of this function, with the result that instead of being able to devote his own money to improvements and development he is often hard put to to provide for repairs, and would often be grateful for a loan himself. On the other hand the banks are chary of advancing a penny to farmers. There have been so many losses that financiers are shy of the land as an investment. Money for the land is not like money for any other commercial purpose. Loans must be for long periods and repayment must be graded in proportion to capacity, and the return is very doubtful. Long period loans at low rates and short term (three and six months) are very necessary, and the only satisfactory way of establishing them is by the joint guarantee of a group of owner-farmers of established position and prosperity. Economists cast doubts on the soundness of such a scheme, but it has yet to be tried on a sufficiently large scale in this country.

Although credits and provision of working capital form basic problems, there is yet another, equally formidable and equally near the heart of the trouble, and that is the fact that the labour expended on the land is in a great number of cases economically

unproductive, chiefly because the peasant does not know how to get the best out of his land. He works from dawn to dusk with little reward, often with decreasing reserves, granted he supplies many of his own needs from farm and garden, but the better conditions that should be his lot are unattainable because the best methods of cultivation are not known to him, and his efforts are misdirected and unproductive in proportion to his expended effort.

Why is he unproductive? Because the scheme of which he is a part is faulty and provides neither stimulus nor reward. Agriculture offers no future whatever to the young villager of intelligence, and he cannot be blamed for leaving the land. The problem becomes one of finding a stimulus. What stimulus would prove effective? Presumably the ideal of independence, freedom and security, with a measure of comfort in return for hard work would prove sufficient. It has done so in practically every country of Europe and there is no reason to doubt that it would do so here. Offer a man a chance of securing a comfortable holding where he can win a livelihood by his own toil on conditions which are possible, and he will accept gladly; it is the one thing necessary in the very nature of man for his mental and physical health.

Bertrand Russell says in his "Principles of Social Reconstruction":—"Every great city is a centre of race-deterioration," yet year by year thousands of young countrymen leave the land. The best physical stock in the country wastes itself in the unnatural atmosphere of our great industrial towns.

The stimulus provided, the flow would cease, and eventually the stream would turn in the opposite direction.

Inducement to remain on the land as farmers, smallholders, and village craftsmen can only be provided by making the life economically attractive. Not that a vast fortune need be held out to tempt reluctant town dwellers to leave their homes and "colonise" England, but that men and women who love the land shall not be condemned to lasting penury as retribution for an attempt to gratify their love. However unpleasant it may seem to transform rural life into an organised and efficient industry instead of an idyllic dreamland where acres and cows are to be had for the asking, it is necessary if this background of financial security is to be obtained. The commercial parts of the rural dwellers' labours could be more efficiently done by communal effort directed by specialists. Educational schemes, publicity, commercial co-operation and expert advice, whether paid for by the State or by the farmers, are necessary if the old happy-go-lucky ways which have prevailed so long, are to be replaced by sound methods.

It is absurd to say that agricultural co-operation is ineffective outside export countries. Look at Germany. Co-operation in England would not be a success on Continental models; it would have to be divided into a multitude of different units guided by a central economic policy. One unit would be created to represent the ramifications of the milk supply, one for beef, one for wheat, one for bacon

and pork, and so on. Each section would have to have separate organisation, but all would be actuated by the same ideal—the perfecting of the machinery which conveys agricultural produce from producer to consumer.

Experiments in agricultural co-operation which have been made in this country have often failed because of the disloyalty or indifference of the members, or the inexperience of the promoters or organisers. One small co-operative society cannot attempt to represent every type of commercial activity which happens to be carried out in its particular district ; it cannot be a general shop, a transport agency, a firm of astute business men, and an agricultural advice bureau all at the same time. The secret of successful co-operation is specialisation on particular problems, and co-ordination of local movements into a national organisation. As a starting point no problem lends itself so completely to co-operative enterprise as the transport business. The whole trouble in local agriculture is often the inaccessibility of markets. Here is the chance of a beginning. Farmers' own capital might equip scores of societies with fleets of motor lorries, which could take their milk, meat, and produce to the consuming centres. From that to the establishment of dépôts and distributive agencies is not a long step. A dépôt is a kind of shop—actual retail shops would follow, and so on. The chief difficulty is that it is by no means easy to establish confidence in the practicability of such schemes. There have been so many failures that farmers are suspicious of

the whole business, yet individual farmers have often built up successful enterprises on their own account and a group should stand as good a chance as an individual.

To get co-operation we must have confidence, and confidence comes only with security. There the State can help. By supporting co-operative enterprises, giving grants to assist the study of the details of the workings, and by capital loans, and other means, co-operation could grow and confidence could be engendered at the same time.

Another fundamental point is that of education. Unfortunately the types of young people who go to farm institutes and agricultural colleges in this country are in far too many cases those who will have no chance of putting their newly-gained knowledge into practice until they are too old to remember that they have learned. They may have to return to the parental roof where innovation is sacrilege. Then again the people who go to these institutions are those who can afford time and money—and they are a very small minority, and not representative of the farming industry as a body.

There are many of us who look to the Avoncroft experiment as being pregnant with great possibilities for good.

Another matter of vital importance which in this country is insufficiently stressed is the establishment of closer contact between the experimental stations and the farmers. It is of no use asking overworked farmers in the middle of the harvest to spend the afternoon at a demonstration farm, a score of miles

away, watching the experimental crops being cut ; what is wanted is a decentralised system by which experiments are carried out simultaneously under expert supervision on the farms themselves, not on distant stations where it is quite impossible for those chiefly interested to see the various stages of the experiments. Again a vital necessity is a series of newspapers under the control of experts giving full descriptions of all types of experiments, discoveries and developments, together with photographs and illustrations. There should be one national organ—a monthly—under the control of an editorial committee of the representative farmers' body, the Ministry of Agriculture and the chief scientific advisers. Each county should have its own local weekly paper devoted to agricultural matters, which would contain, in addition to the type of matter referred to, hints about account keeping and suggestions on the saving of labour and time in the little jobs of the daily round. Farmers should be encouraged to contribute matter of general interest, and there should be a number of experts available to answer queries—veterinary, legal and so forth. These local weeklies might be edited by the staff of the County farm institute or similar body, and no aspect of farming should be left untouched, from Foot and Mouth Disease to the best way of hoeing turnips.

Many good people babble about the lack of amenities in village life. Most villages have a hall or schoolroom available for one night a week in the slack season. Why should not local branches of the

National Farmers' Union hold occasional smoking concerts at which twenty-minute talks (followed by brief discussion) might be given by local farmers (varied by invited experts) on matters of current interest to farmers? In a village near the writer's home the only "amenities" are a billiard table, an annual Church concert, a few insipid dances, and whist drives, and a few lectures to ladies on poker-work or embroidery or similar impracticalities. Very pleasant in their way, but not the kind of thing a farming community needs or appreciates.

There are many things to discuss, but technicalities would insist on entering the field and the writer is pledged to avoid them.

However, before we can make much progress in any direction we must know more about the land and the systems in operation in different parts of the country. The example of Kincardineshire might well be followed; there an exhaustive review has been carried out into the details of the working and holding of the land, and the facts revealed form a basis for future development. An extension of the idea to all the counties of England and Wales would be essential before any general policy could be formulated.

At present information is far too scanty and instead of being available at one centre, must be sought either from the County Councils, the Farmers' Union or the Ministry or other bodies. The writers personal experience in Denmark is that when one wants to ascertain a certain figure relating to agricultural returns, the information is available

almost as soon as asked for, and is tendered with infinite courtesy accompanied by the offer of further assistance whenever needed. Here in England one's experiences are rather different.

A solution is not to be found along the line of arbitrary enactments, nor will vague Utopian schemes help us, but by fostering individual efficiency and encouraging the national pride which keeps our best farmers on the land in spite of hard times, we may expect from the working farmers themselves the movement which will appeal to the Nation as a whole, and will eventually result in the regeneration of British Agriculture.

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I.

Table to illustrate Denmark's total imports and Exports and Import surplus. Figures in each case refer to millions of Kroner. (£1=18.20 Kroner).

Date		Total Imports.	Total Exports.	Import Surplus.
1913	.. ..	855.4	721.3	134.1
1921	.. ..	1697.4	1564.4	133.0
1922	.. ..	1552.9	1283.2	269.7
1923	.. ..	2030.5	1684.8	345.7
1924	.. ..	2360.7	2351.7	209.0

II.

Table to illustrate percentage distribution of Denmark's trade in 1923.

		Total Imports per cent.	Export of Danish Goods per cent.	Total Exports per cent.
Germany	.. ..	32.0	6.2	6.2
Great Britain	.. ..	20.1	68.7	63.1
Norway	.. ..	2.0	3.6	4.5
Sweden	.. ..	5.7	4.2	7.8
Finland	.. ..	1.5	0.7	1.5
Russia	.. ..	1.4	—	0.1
Holland	.. ..	2.8	1.0	1.0
France	.. ..	3.0	1.1	1.0
Switzerland	.. ..	0.8	2.5	2.3
Czecho-Slovakia	.. ..	0.4	3.6	3.3
United States	.. ..	12.5	1.7	1.8
Argentina	.. ..	1.5	0.2	0.2
China	.. ..	1.4	0.2	0.2
Other Countries	.. ..	14.9	6.3	7.0
		<u>100.</u>	<u>100.</u>	<u>100.</u>

III.

A Typical Week.—The table shows Denmark's export of Agricultural Produce during one week selected at random from the returns. Many products are omitted—particularly those in which Great Britain does not figure as an extensive purchaser. The week selected is from April 10th to April 16th, 1926.

	10/4—16/4		Aggregate Export.	
	1926.	1925.	1924.	1913.
<i>Butter</i> (in tons)				
Total	2,624	122,777	123,393	91,024
England	1,977	83,287	86,200	82,519
Norway and } ..	—	331	439	—
Sweden } ..	—	1	42	—
Germany } ..	—	33,563	25,727	1,573
Switzerland } ..	637	2,093	4,912	223
Czecho-slovakia } ..	—	234	1,023	—
<i>Cheese</i> (in tons).				
Total	115	8,520	8,846	300
Germany	101	7,887	7,593	57
England	8	263	562	3
<i>Eggs</i> (in 1,000 scores).				
Total	1,076	40,334	41,624	22,723
England	807	32,739	32,812	21,003
Germany	255	7,338	7,590	897
<i>Bacon and Pork</i> (in tons).				
Total	3,238	191,510	197,172	126,354
England	3,166	189,120	195,567	123,729
Germany	71	2,126	852	1,690
<i>Meat</i> (in tons).				
Total	543	25,880	3,817	15,117
England	62	1,825	1,259	309
Germany and } ..	479	23,977	1,013	12,966
Holland } ..	—	28	1,438	—

IV.

Shipment of Danish Agricultural Products to England during the week April 11th to April 17th, 1926.

		Tons of Butter.	Tons of Bacon.	Tons of Eggs.
To Parkeston	..	225	1,181	145
To London	.. ..	19	796	406
To Newcastle	..	523	288	222
To Hull	.. ..	111	191	99
To Grimsby	.. ..	683	633	137
To Goole	.. ..	864	255	2
To Leith	.. ..	491	52	259
		<hr/>	<hr/>	<hr/>
Totals	.. ..	2,216	3,396	1,270
		<hr/>	<hr/>	<hr/>
Totals of the previous				
week	.. ..	2,120	2,964	1,116
		<hr/>	<hr/>	<hr/>

V.

Table illustrating the change from Grain-Producing to Arable Dairying. Figures represent millions of Kilograms.

Year.			Grain, Corn, and Cake.	Meat and Bacon.	Butter.
1875	..	..	.. 158	45	12
1880	..	..	.. 107	44	10
1882	..	..	.. —26	55	13
1885	..	..	.. —163	46	16
1890	..	..	.. —372	64	35
1895	..	..	.. —668	68	44

VI.

Table showing number of holdings and estates according to the national returns of 1919.

Note.—Areas are given in Hectares (1 Hectare=2.471 acres).

Area of Holding		Number. Agricultural Area.			
		Total	Per cent	1,000 ha.	Per cent
0.55 to 3.3 ha.	..	43,891	21.3	82	2.5
3.3 to 15 ha.	..	90,748	44.1	721	21.8
15 to 60 ha.	..	65,916	32.0	879	56.7
60 to 120 ha.	..	4,039	2.0	332	10.0
120 to 240 ha.	..	916	0.4	153	4.6
240 and over ha.	..	419	0.2	147	4.4
Totals	..	<u>205,929</u>	<u>100</u>	<u>3,314</u>	<u>100</u>

VII.

Table showing utilisation of holding according to size.

Size	Grain	Root	Other	Grazing	Fallow.	Total.
(in ha.)	per cent.	Crops.	Crops.	per cent.	per cent.	per cent.
0.55—3.3	37.2	18.2	11.5	30.9	2.2	100.0
3.3—15	39.1	16.2	4.2	36.7	3.8	100.0
15—60	37.2	13.3	3.5	41.5	4.5	100.0
60—120	33.5	10.9	3.9	47.3	4.4	100.0
120—240	36.0	11.2	5.5	42.2	5.1	100.0
240 and over	37.4	10.6	7.1	38.7	6.2	100.0
Totals	<u>37.2</u>	<u>13.6</u>	<u>4.1</u>	<u>40.7</u>	<u>4.4</u>	<u>100.0</u>

VIII.

Table to show the number of animals per 100 Hectare (1923 figures).

Size (in ha.)		Horses.	Cattle.		Pigs.	Sheep.	Poultry.
			Total.	Cows.			
0.55—3.3	..	29	114	65	177	13	2,898
3.3—15	..	22	89	54	115	13	825
15—60	..	16	80	39	87	13	335
60—120	..	12	67	30	67	9	150
120—240	..	11	65	33	51	5	107
240 and over	..	10	71	41	31	3	55
Average	..	17	81	43	90	12	458

IX.

Table showing the increase in yields of Danish Herds from 1898, and also the improvement in quality shown by the lower quantity necessary to produce a given quantity of butter.

Year.			Kilos of Milk to one Kilo of Butter.		Kilo of Milk per Cow.
1898	26.5	1970
1900	26.3	2170
1902	25.9	2340
1904	25.0	2420
1906	25.6	2360
1908	25.6	2661
1910	25.6	2565
1912	25.5	2570
1914	25.4	2644
1915	25.2	2555
1916	24.7	2593
1917	25.0	2412
1918	25.2	1834
1919	24.9	1658
1920	24.8	2142
1921	25.0	2503
1922	24.5	2592
1923	24.4	2749

X.

Table showing food values of various kinds of Feeding Stuffs. (Unit, one kilo of Danish Barley).

Peanut Cake, 0.8 kg.	Linseed Cake, 0.9 kg.
Cottonseed Cake, 0.85 kg.	Copra Cake, 0.8 kg.
Sesame Cake, 0.8 kg.	Palm Cake, 1.0 kg.
Soya Cake, 0.8 kg.	Oats, 1.2 kg.
Sunflower Cake, 0.9.	Maize, 0.95 kg.
Rape Cake, 0.9.	Lupines, 0.9 kg.
Bran, 1.2 kg.	
Turnips, etc., 1.1 kg. (approx.)	
Hay, 2.5 kg.	"
Straw, 5.0 kg.	"
Green Feed, 7 to 10 kg.	"

XI.

Illustration of typical Rotations adopted in different parts of Denmark.

Typical Smallholding. 1st year, Roots. 2nd year, Winter Corn (wheat or rye). 3rd year, Mangolds. 4th year, Barley. 5th and 6th year, Clover and Grass. 7th, year, Oats. 8th year, Greens and Potatoes.

Typical Farm (middle size) in Fünen. 1st year, Fallow. 2nd year, Wheat and Rye. 3rd year, Barley. 4th year, Roots, Beet or Peas, etc. 5th and 6th years. Clover and Grass. 7th year, Green Feed and Roots. 8th year, Oats.

Typical Large Farm in Jutland. 1st year, Green Crops (or Fallow where adopted). 2nd year, Winter Corn (usually Rye). 3rd year, Barley. 4th year, Mangolds and other Roots. 5th year, Barley or Oats. 6th and 7th years. Clover and Grass. 8th year, Oats.

Harald Faber, "Co-operation in Danish Agriculture" (1918).

E. C. Branson, "Field Letters from Germany, Denmark and France" (1924).

"Denmark, 1926" (Published by the Danish Ministry of Foreign Affairs).

I.

Table to illustrate Denmark's total imports and Exports and Import surplus. Figures in each case refer to millions of Kroner. (£1=18.20 Kroner).

Date		Total Imports.	Total Exports.	Import Surplus.
1913	.. ..	855.4	721.3	134.1
1921	1697.4	1564.4	133.0
1922	1552.9	1283.2	269.7
1923	2030.5	1684.8	345.7
1924	2360.7	2351.7	209.0

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